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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,343	01/09/2006	Volker Dolle	8019.100	7375
26474 7590 11/01/2007 NOVAK DRUCE DELUCA & QUIGG, LLP 1300 EYE STREET NW			EXAMINER	
			LEE, RIP A	
SUITE 1000 WEST TOWER WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			1796	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/539,343	DOLLE ET AL.			
Office Action Summary	Examiner	Art Unit			
•	Rip A. Lee	1796			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 2a) ☐ This action is FINAL.					
Disposition of Claims					
4) Claim(s) <u>1-14</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) <u>1-14</u> is/are rejected. 7) Claim(s) <u>3, 4 and 9</u> is/are objected to. 8) Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction in the original of the correction and the original	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 01-09-2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te			

DETAILED ACTION

Claim Objections

1. Claims 3, 4, and 9 are objected to because of the following informalities: While the claims not a "use claims" per se (vide infra), they recite the term "is used." It is not clear how the polypropylene polymers are to be used. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "high molecular weight" in claims 1, 3-5, 10 is a relative term which renders the claims vague and indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Dependent claims 2, 6-9, and 11-14 are subsumed under the rejection.
- 4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims describe a composition made from polymer with a proportion of 2-8 wt % of β-crystallites. Quantification of this component is meaningless unless that value is framed relative to other components in the composition. Therefore, it is not clear what the claim intends to encompass. As such, the scope of the claim is vague and indefinite.

Application/Control Number: 10/539,343 Page 3

Art Unit: 1796

5. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims provide for the use of a molding composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 12 and 13 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/539,343 Page 4

Art Unit: 1796

8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 9. Claims 1-8 and 10-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Helberg *et al.* (EP 278 470).

The prior art of Helberg *et al.* relates to preparation of polypropylene compositions with nucleating agent. Inventive compositions may contain polypropylene homopolymer or copolymer provided that the melt index is less than 5 g/10 min, and preferably, less than 2 g/10 min (230 °C, 5 kg); col. 2, lines 11-18). A representative embodiment of the invention is shown in example 1, wherein the composition contains polypropylene homopolymer having a melt index of 0.26 g/10 min and 0.001 wt % of quinacridone. The reference does not disclose the properties of the resulting composition in terms of percent β-crystallites, however, in view of the fact that the composition contains substantially the same type of polypropylene and nucleating agent as that recited in the instant claims, a reasonable basis exists to believe that the composition exhibits the claimed property. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Compositions are prepared by extrusion, and they are well suited for making pipe (page 3, col. 3, line 14).

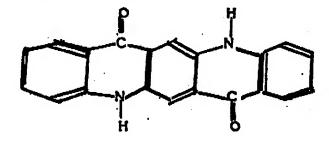
Application/Control Number: 10/539,343

Art Unit: 1796

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helberg et al. in view of Kathan et al. (EP 177 961).

Helberg *et al.* discloses the nucleating agent, γ -quinacridone, but there is no further description of the structure of this material. Helberg *et al.* cites DE-AS 1 188 279 as the reference for information on this material. The same reference appears in Kathan *et al.* (EP 177 961 A2), cited as DE-PS 1 188 279 (page 2, line 1). The relevant passage from the Kathan *et al.*, reproduced below for convenience, reveals that the structure of γ -quinacridone is the γ -phase of linear trans-quinacridone.

Aus der DE-PS-1 188 279 gelit weiters hervor, daß durch Zusatz von 0,0005 bis 0,005 Prozent-Masse der gamma-Phase des ilnearen trans-Chinacridons der Formel



Thus, it would have been obvious to one having ordinary skill in the art to use this compound as the γ-quinacridone nucleating agent because the prior art teaches this particular material is useful as a b-nucleating agent for polypropylene resin. The combination is obvious because Helberg *et al.* teaches its use, but not its structure, and Kathan *et al.* provides the obvious missing element.

11. Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfschwenger et al. (U.S. 5,681,922).

Example V1 of Wolfschwenger et al. discloses a polypropylene homopolymer having a melt index of 0.3 g/10 min (ISO 1133, 230 °C, 2.16 kg) and having a proportion of 1 % of β -crystallites. The deficiency of the prior art is that it discloses a proportion of 1 % of β -crystallites, while the present claims require 2 % of β -crystallites. It is apparent, however, that the instantly claimed amount of 2 % and that disclosed Wolfschwenger et al. art are so close to each other that the fact pattern is similar to the one in In re Woodruff, 919 F.2d 1575, 16

Art Unit: 1796

USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) where, despite a slight difference in the ranges, the court held that such a difference did not "render the claims patentable," or, alternatively, that "a *prima facie* case of obviousness exists where the claimed range and prior art range do not overlap, but are close enough so that one skilled in the art would have expected them to have the same properties."

In light of the case law cited above, and given that there is only a slight difference between the amount of 1 % disclosed by the prior art and the amount disclosed in the present claims and further, given the fact that no criticality is disclosed in the present invention with respect to the amount of 2 %, it would have been obvious to one of ordinary skill in the art that the amount of 1 % recited in the present claims is but an obvious variant of the amounts disclosed in the prior art, and accordingly, one of ordinary skill in the art would have arrived at the claimed invention.

Whereas the melt index reported in the reference is carried out using a load of 2.16 kg, the claims indicate use of 5 kg. However, a reasonable basis exists to believe that the same material tested for melt index at the cited load of 5 kg, exhibits a melt index that lies in the range cited in the instant claims. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Art Unit: 1796

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

October 29, 2007